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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Nicolaos Tapazoglou

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EXAMINER

BINDA, GREGORY JOHN

ART UNIT

PAPER NUMBER

3679

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/754,422	Applicant(s) TAPAZOGLU ET AL.	
	Examiner Greg Binda	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2005 and 11 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 3-5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 6-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. The affidavit filed on September 13, 2005 under 37 CFR 1.131 is sufficient to overcome the Blumke reference.

Election/Restrictions

3. Claims 3-5 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim.

Election of Species I shown in Figs. 1 & 2 **without** traverse and was affirmed in the reply filed on September 13, 2005.

Drawings

4. The replacement drawings filed October 11, 2005 are approved.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1, 2 & 6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter that was not described in

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the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1, line 5 recites the limitation, “an intentionally weakened area having maximum susceptibility to buckling transversely . . . under axial load”. The specification teaches no such structure, instead it merely alleges that a tapered area is more susceptible to bending than non-tapered areas. There is no teaching of how to provide the weakened area “intentionally” or otherwise with a maximum susceptibility to buckling transversely.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1, 2 & 6-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1, line 5 and claim 7, line 6, recite the limitation, “an intentionally weakened area”. It is not clear how an “intentionally” weakened area differs from any other weakened area. Would a competitor’s shaft, having structure identical to applicant’s shaft, not infringe the instant claims if its weakened area were unintentional?

Claim Rejections - 35 USC § 102

9. Claims 1 & 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Miller, US 6,435,299. Fig. 7A shows a vehicular propeller shaft system comprising: a first section 14 extending along a longitudinal axis and adapted to be positioned toward a vehicular engine, the first section including an intentionally weakened area (see Fig. 8) susceptible to buckling

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transversely to the longitudinal axis under a generally axial predetermined load; and a second section 16 having a first end coupled to the first section and a second end adapted to be coupled to a rear differential.

10. Claims 1, 2 & 6-8 rejected under 35 U.S.C. 102(b) as being anticipated by Jacob, US 6,241,617. Fig. 1 shows an automotive vehicle comprising: a motive power source 3; and a propeller shaft assembly extending along a longitudinal axis for transmitting power from the power source to a differential 5. The propeller shaft assembly comprises: a first section 9 extending along the axis between the motive source and a mounting bracket 11, the first section including tapered section (i.e. a section that transversely buckles); and a second section 10 coupled to the first section at an end at the mounting bracket and a second end coupled to the differential which is supported by another bracket.

11. Claims 1 & 6-8 rejected under 35 U.S.C. 102(b) as being anticipated by Murata et al, US 6,213,245 (Murata). Fig. 4 & 6 show an automotive vehicle comprising: a motive power source 1, 3; and a propeller shaft 2 assembly extending along a longitudinal axis for transmitting power from the power source to a differential (see also col. 1, line 38). The propeller shaft assembly comprises: a first section 2A extending along the axis between the motive source and a mounting bracket 6, the first section including a transverse buckling section (see Fig. 6); and a second section 2B coupled to the first section at an end at the mounting bracket and a second end coupled to the differential which is supported by another bracket.

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12. Claims 1, 2 & 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Uchida et al, US 4,778,026 (Uchida). Fig. 2 shows all the limitations of the claims.

13. Claims 1, 2 & 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Nelson et al, US 4,050,534 (Nelson). Fig. 1 shows all the limitations of the claims.

14. Claims 1, 2 & 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Breese, US 5,643,093. Fig. 1 shows a vehicular propeller shaft 16 system comprising: a first section extending along a longitudinal axis and adapted to be positioned toward a vehicular engine, the first section including a tapered section 21 susceptible to buckling transversely to the longitudinal axis under a generally axial predetermined load; and a second section having a first end coupled to the first section and a second end adapted to be coupled to a rear differential 14.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Jacob, Murata, Uchida and Nelson. Each reference shows a vehicle comprising every limitation of the claim except none expressly discloses the rear section of the propeller shaft being partially

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surrounded by a fuel tank. However, it is well known in the art to partially surround the rear section of a vehicle's propeller shaft with a fuel tank (see for example Walker, US 2,808,892). As such, it would have been obvious to one of ordinary skill in the art at the time of the invention to make the vehicle of any one of Jacob, Murata, Uchida and Nelson by including a fuel tank that partially surrounds the second section of the propeller shaft since such a feature is common in the art.

Response to Arguments

17. Applicant's arguments filed September 13, 2005 have been fully considered but they are not persuasive.

- a. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. a front section and a fuel tank) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
- b. Applicant argues Jacob fails to anticipate the claims because in it "there is no teaching of transverse buckling". However, Jacob's Fig. 1 clearly shows a tapered section that is no different than the instant tapered section 202 which is all the structure applicant teaches for providing transverse buckling.

Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (571) 272-7077. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Greg Binda
Primary Examiner
Art Unit 3679